

REMARKS

Claims 1-10 are canceled. Claims 11-20 are pending. Claims 10, 13, 15, 17 and 23 are amended. New claims 24 and 25 have been added.

Priority

In accordance with 35 U.S.C. §119(e) and 35 U.S.C. §120, the Applicants have submitted an amendment containing a specific reference to the prior filed applications in the section above entitled "In the Specification".

Claim Objections

Claims 10 and 17 are objected to based upon several informalities relating to antecedent basis. Claims 10 and 17 have been amended to correct the informalities. No new matter has been added with these amendments. Applicants respectfully request withdrawal of the claim objections.

Claim Rejections – 35 USC §112

Claims 13, 15 and 23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 13 is rejected because of the recited limitation "the comparison." Claim 13 has been amended to recite, "a difference between the nominal value ($S_{Dsnominal}$) and the actual value ($S_{Dsactual}$) of the travel (S_{Ds}) covered by the output member (20) of the brake booster (3)." No new matter has been added with this amendment, as the amendment is supported by the specification at paragraph [0020].

Claims 15 and 23 have been rejected because of the abbreviation "e.g." renders the claim indefinite. Claims 15 and 23 have been amended to delete the abbreviation "e.g." No new matter has been added with these amendments.

Applicants respectfully request withdrawal of the §112 rejections of claims 13, 15 and 23.

Claim Rejections – 35 USC §103

Claims 10, 12, 16, 17, 21 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 2004/005095 A1 to Von Hayn et al. in view of US 6,209,968 to Bayens et al.

Obviousness is a question of law based on factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1 (1966). MPEP § 2141. The *Graham* factual inquiries include (A) determining the scope and content of the prior art; (B) ascertaining the differences between the claimed invention and the prior art; and (C) resolving the level of ordinary skill in the art. *Id.* “The question of obviousness must be resolved on the basis of these factual determinations. While each case is different and must be decided on its own facts, the *Graham* factors, including secondary considerations when present, are the controlling inquiries in any obviousness analysis.” *Id.*

A proper rejection under 35 U.S.C. §103(a) requires that, the Examiner must establish an “apparent reason” to modify the reference or to combine reference teachings. *KSR Int’l Co. v. Teleflex, Inc.*, No. 04-1350 (U.S. Apr. 30, 2007). According to the United States Supreme Court, “[o]ften, it will be necessary ... to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue. To facilitate review, this analysis should be made explicit.” *KSR Int’l Co. v. Teleflex, Inc.*, No. 04-1350 (U.S. Apr. 30, 2007), slip op. at 14 (emphasis added).

Claims 10 recites, *inter alia*, “a pedal travel simulator which ... can be enabled in the ‘brake-by-wire’ operating mode when the force-transmitting connection between the brake pedal and the brake booster is decoupled and can be disabled outside the ‘brake-by-wire’ operating mode... and a monitoring module (24) which, in the case of a fault such as inclusion of air or brake circuit failure, performs a partial compensation of the extension of the travel (S_{Ds}) covered by the output member (20) of the brake booster (3), which extension is caused by the fault.” (Emphasis added). Independent claim 17 similarly recites, “a monitoring module (24) being provided which, in the case of a fault such as the inclusion of air or brake circuit failure, switches the control circuit from the travel control mode to the pressure control mode in order to perform a compensation of the extension of the travel (S_{Ds}) covered by the output member (20) of the brake booster (3), which extension is caused by the fault.”

The Examiner states that, “Van Hayn et al. further teach that the control unit can detect a malfunction in the brake circuit, see paragraph 39. However, Von Hayn et al. fail to teach the response the electronic unit would initiate upon detecting the malfunction, in particular performing a partial compensation of the extension on the travel by the output member.” The Examiner relies on Bayens et al. to teach a compensation procedure and states that, “It would

have been obvious to one of ordinary skill in the art at the time of the invention to have provided the system of Von Hayn et al. with a means of addressing the brake circuit malfunctions as taught by Bayens et al., thereby ensuring the proper brake fluid pressure is applied to the wheel cylinder units.” Applicants respectfully disagree.

Van Hayn et al. teach a brake by wire system that has a control unit that can switch between a brake-by-wire operation mode and a fallback mode. The control unit switches to the fallback mode when the control unit senses a malfunction (specification at paragraph [0039]). Therefore, Von Hayn et al. does teach a response the electronic unit would initiate upon detecting “a malfunction,” and there is no motivation to use the system of Bayens et al. to teach a response.

Further, Bayens et al. teach a brake system and an arrangement that relies on pressure information to reduce the difference between the response force of the brake force booster and the restoring force acting on the valve piston (column 3, lines 44-51). Bayens et al. does not teach a brake-by-wire system that “performs a partial compensation...of a brake booster output member” in the case of a fault, as recited by Applicants’ claims 10 and 17.

Finally, neither Von Hayn et al. nor Bayens et al. disclose alternatively relying on the pressure in a brake booster and the travel of a brake booster output member to detect the fault, as recited by Applicants’ claims 12, 17, and 21.

Thus, claims 10, 12, 16, 17, 21 and 24 are allowable over Holmes et al. in view of Gruian for at least these reasons. Withdrawal of the 35 U.S.C. § 103(a) rejections of these claims is respectfully requested.

New Claims

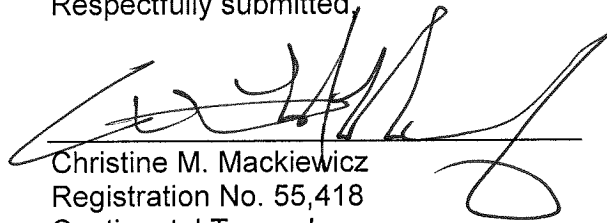
Applicants have added new claims 25 and 26, as set forth in the “Listing of the Claims” section, *infra* at 7. No new matter is being introduced into the subject application through the proposed addition of claims 25 and 26, as the claims are properly supported by paragraph [0020] of the specification.

CONCLUSION

Accordingly, Applicants believe that the claims as amended overcome the raised objections and rejections and are in a condition for allowance.

Applicants do not believe any fees are due in connection with the filing of this Response. If, however, Applicants are in error and there are additional fees due, including any extension fees, please charge all such required fees to Deposit Account 50-2570.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Christine M. Mackiewicz', is written over a horizontal line.

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